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# Searching for the bottom

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## Searching for the bottom

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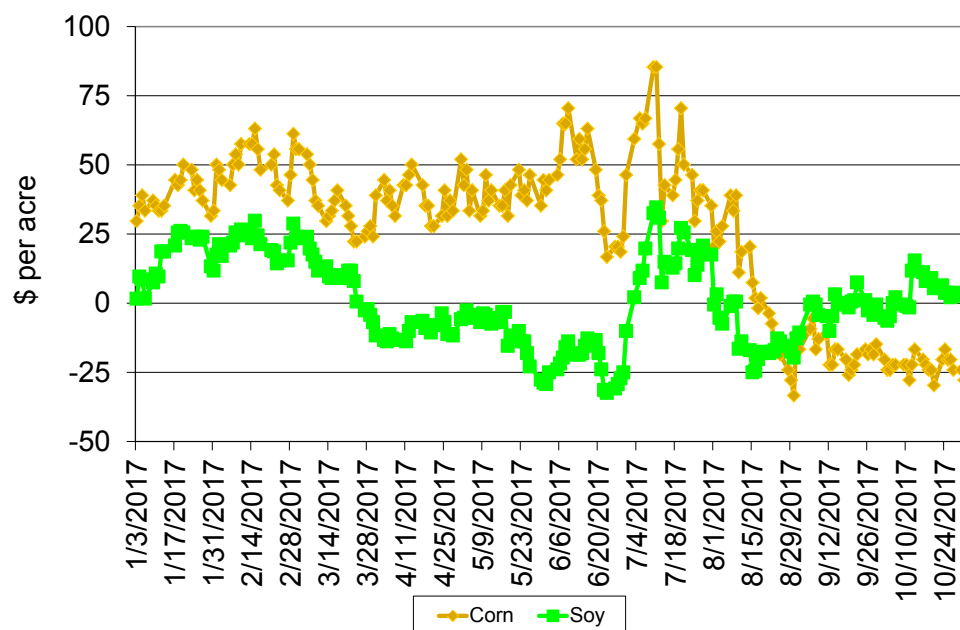
Looking back over the last ten years, crop agriculture has swung between two regimes. The years 2007 to 2012 were characterized by strong crop prices, driven in the beginning by record building demand and at the end by a drought. The years 2013 to 2017 are characterized by strong crop production, a consistent string of large harvests that have been more than enough to meet and exceed demand. The outlook for 2018, based on the information we have today, suggests that pattern will continue for at least another year.

For corn, while the 2017 crop is smaller than its' predecessor, it is still projected to be the 2nd largest crop ever. This continues the string of large corn crops, with the last five U.S. corn crops being the five largest ever. Corn usage over the past five years has been robust as well, but usage is running just short of supplies. Corn stocks have built and corn prices have retreated.

Feed usage continues to grow with the general expansion in the livestock sector. Biofuel usage has entered an era of slower, but steadier, growth. Combined, these two sources of demand provide a solid 11 billion bushel usage base for the corn market. Food, seed, and industrial usage has been slowly building as well. The wildcard is the export picture. In general, international corn demand has been growing over the past five years. But with greater competition of other corn producers worldwide (Brazil, Argentina, Ukraine, etc.), export projections have slipped a bit for the current marketing year.

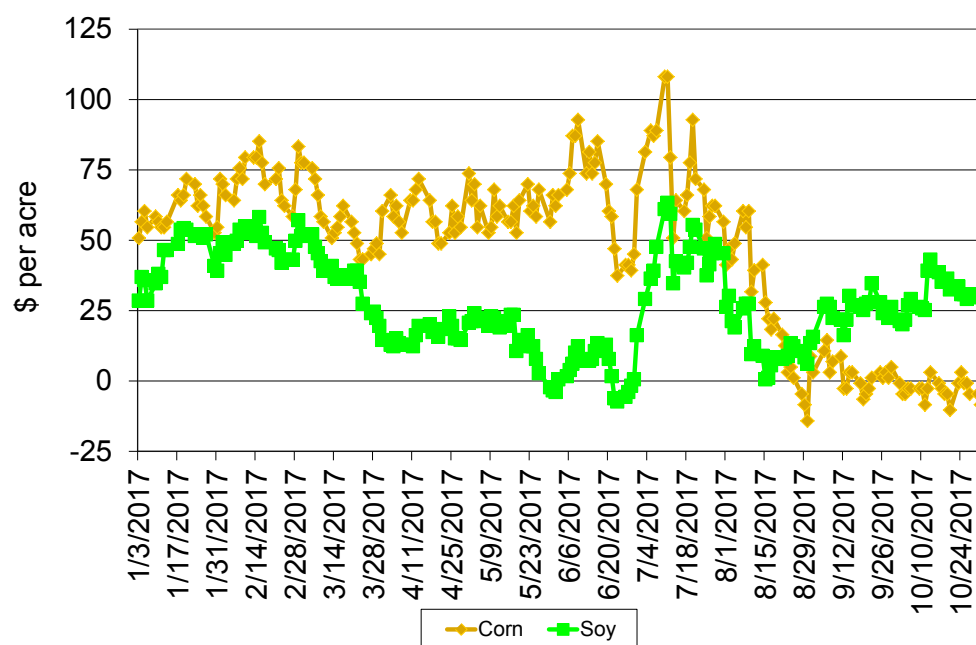
For soybeans, 2017 is basically a continuation of 2016, with record acreage, production, and usage. But as with corn, supplies are slightly exceeding usage. Stocks are building and prices have retreated. Soybean's demand structure has been relatively more supportive than corn's, so in relative terms soybean prices have held up better. Domestic soybean crush usage has slowly grown, while international usage continues to build at a record pace.

Pricing patterns over the past few years have returned to a typical historical pattern, with crop prices generally building through the spring and early summer, only to retreat later as we approach the harvest season. Figures 1-3 show that pattern for 2017 under a few different assumptions. Figure 1 shows estimated crop margins for 2017/18, based on futures prices throughout the year, ISU Extension projected production costs, trend yields, and historical average basis levels. Under those assumptions, estimated Iowa crop margins started out in positive territory, swooned a bit from March to June, hit their peaks in early July, and retreated significantly in August and early September. Recently, corn margins (and prices) have been slowly falling, while soybean margins (and prices) have rebounded. But with the harvest, more information has come in to help us firm up these estimates. We know yield estimates are running above trend, but basis levels are below historical average.



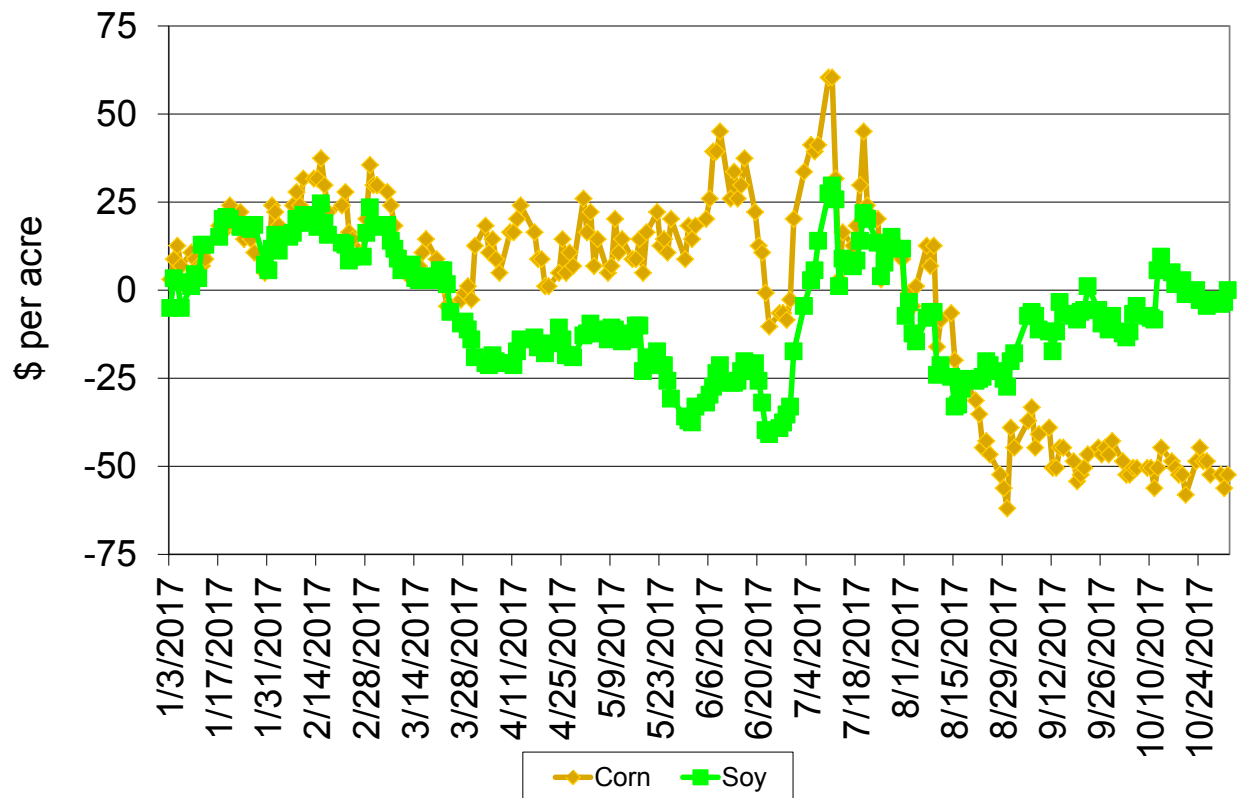
**Figure 1.** Estimated 2017/18 crop margins, at trend yield and historical average basis.

Figure 2 contains the estimated crop margins at updating for the 2017 yields. The yield shift alone adds roughly \$20-30 per acre to projected margins. This bump comes from the extra bushels to sell, but also the reduction in costs (on a per bushel basis). This year, the yield bump on margins is similar across the crops. And if that were the end of the story, soybean returns would be decent, while corn returns would be hovering around breakeven. But alas, that is not the end of the story.



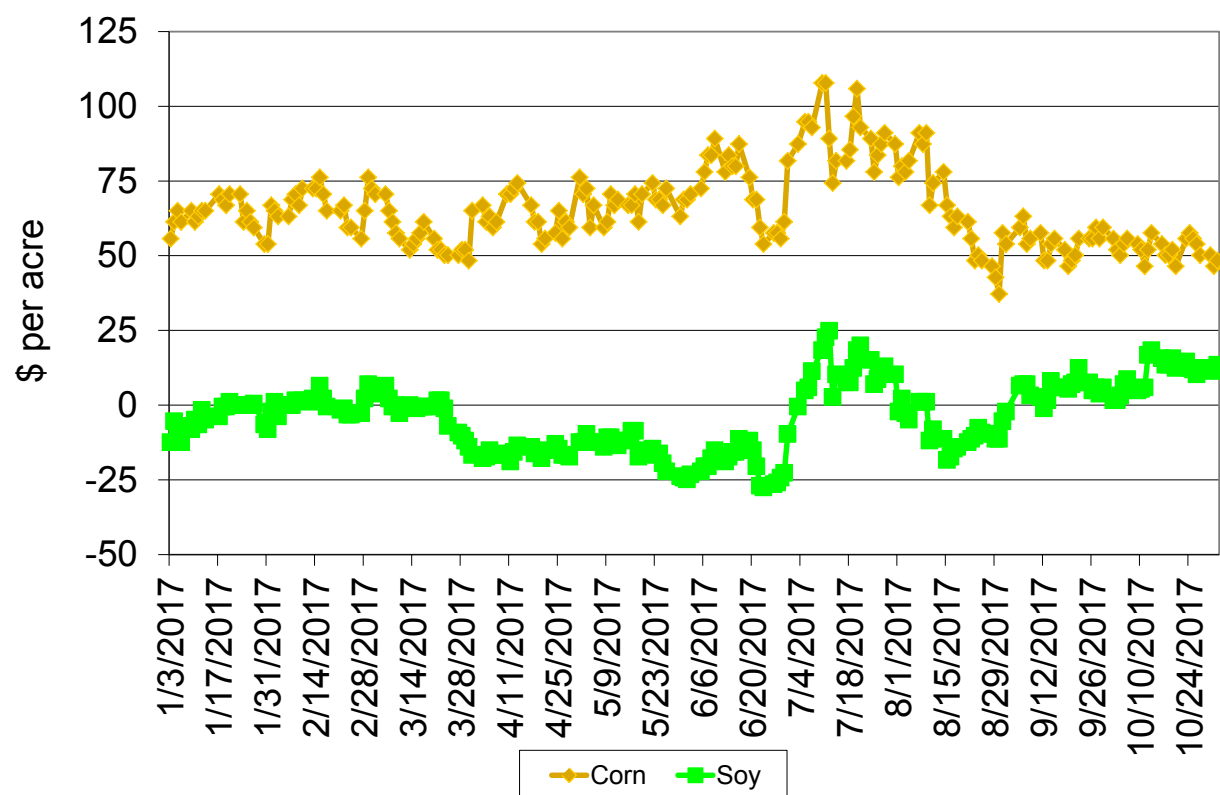
**Figure 2.** Estimated 2017/18 crop margins, at 2017 estimated yield and historical average basis.

The building of crop stocks has limited improvement in basis levels. Throughout most of this year, basis levels have run below historical averages and that continues today. Figure 3 factors in the impact of those weaker basis levels. The margin impacts of the weaker basis are more than enough to offset the extra bushels. And corn margins take a bigger hit than soybean margins. In total, soybean margins are hovering around breakeven, while corn margins have sunk to nearly the lowest levels for the year. That said, these graphs also remind us why we look at pre-harvest marketing and post-harvest storage for margin improvement. Both crops had positive pricing opportunities earlier in the year and seasonal pricing patterns would suggest more opportunities next spring and summer as well.



**Figure 3.** Estimated 2017/18 crop margins, at 2017 estimated yield and current basis.

Looking forward to the 2018 crop year, crop futures are providing some support for improving returns in the coming year. Computing margins based on 2018 trend yields, historical average basis, and holding costs steady at 2017 levels, both 2018/19 corn and soybean projected margins are holding above breakeven. However, given the stocks, I would discount these projections by \$30-50 per acre (the basis effect). That would basically put both crops around breakeven. And while that's not an optimistic outlook, it's better than we've had over the past few years. Last year at this time, this graph was showing \$50 losses.



**Figure 4.** Estimated 2018/19 crop margins, at trend yield, historical average basis, and 2017 costs.

The dynamics for better margins are still holding in the markets. Usage continues to grow and traders have shown a willingness to ride price higher, as evidenced by the spring rallies over the past couple of years. As has been indicated before, the markets are hoping supplies slow down just enough to allow usage to catch up. Given the wider basis levels today, futures and options based marketing strategies offer better opportunities than cash positions currently. And while the basic storyline in the crop markets remains similar to previous years, the outlook is getting a little brighter.